

What is Single Incision Laparoscopic Surgery?

How is a laparoscopic operation performed?

During laparoscopic operations the surgeon makes a small (about 1-cm) incision and places a short tube called a cannula through the abdominal wall. This cannula is connected to a special pump that pumps carbon dioxide gas. As the abdomen gets filled up with the gas, the abdominal wall is lifted up, thus providing the surgeon a space to work in. To look inside the abdomen, the surgeon passes a rod-like telescope through the cannula. The telescope is connected to a miniature video camera that picks up the picture of the inside of the abdomen and transmits it to a television screen. The surgeon then carries out the operation with the help of special, long instruments introduced inside the abdomen through other cannulas and by observing the picture of the operative site on the television screen. It is important to appreciate that the actual laparoscopic operation being carried out is more or less identical to the open procedure. The major difference is that the steps are performed with the help of specialized equipment and therefore can be carried out through small incisions.

How is single incision laparoscopic surgery different?

In single incision laparoscopic surgery (SILS) only one incision of around 2 – 2.5 cm is made at the umbilicus and the telescope as well as all the instruments are passed through that. There are two ways of performing SILS. Either the surgeon uses a specialized access device (access port) through which the telescopes as well as specialized roticulating instruments are passed inside the abdomen. These devices, however, are disposable and add substantially to the cost of SILS.

An alternate approach (which we prefer) is to pass multiple cannulas or tubes side-by-side through the same incision and introduce standard laparoscopic instruments through these cannulas. It is possible to perform many of the operations done by standard laparoscopic surgery using this “single-incision, multi-port” approach in a cost effective manner.

Which operations can be performed using the SILS technique?

The operations that are currently performed using the SILS approach include

- SILS cholecystectomy (removal of the gallbladder)
- SILS appendectomy (removal of the appendix)
- SILS excision of diseased small bowel
- SILS Oophorectomy or ovarian cystectomy (removal of ovary or ovarian cyst)

What happens if an operation cannot be completed by SILS?

In 5% to 10% patients it may not be possible to complete the operation by SILS due to technical difficulties. The surgeon places one or two additional cannulas and completes the procedure in the traditional laparoscopic manner. Very rarely, it may be necessary to convert to an open operation. Both these issues are always discussed with patients prior to surgery and they are made aware that conversion to traditional laparoscopy or indeed to open surgery merely represents a sound judgment on part of the surgeon in the interest of patient safety.

What are the costs involved in SILS?

Using innovative techniques and indigenous instruments Dr Bhandarkar now offers his patients SILS at exactly the same cost as traditional laparoscopic surgery. So the patients can enjoy the benefits of this revolutionary surgery at no extra expense.

What are the advantages of single incision laparoscopic surgery?

- Less pain from the single, short incision after surgery
- Shorter hospital stay
- Shorter recovery time
- Faster return to normal diet

- Faster return to work or normal activity
- Better cosmetic healing (almost invisible scar)

Prepared by
Dr Deepraj Bhandarkar
www.laparoscopyindia.com

Disclaimer

This brochure is for information purpose only and no attempt to provide specific medical advice is intended. It is not intended to infer that surgery is always the best choice for a particular condition. You should always contact a specialist directly for diagnosis and treatment of your specific problem, and consider taking a second opinion if appropriate.